

## **ATF News Article**

**June 10, 2015**

### **Alcohol, Tobacco, Firearms and Explosive (ATF) Collaborates with the Public...**

On June 6, 2015, the Bureau of Alcohol, Tobacco, Firearms and Explosive (ATF) participated in the Third Annual National Day of Civic Hacking, facilitated by the Office of Science and Technology. The National Day of Hacking is an opportunity for residents, community groups, and government to collaborate to make their communities stronger through the use of government-provided data.

The ATF invited the civic “hackathon” community to develop innovative ideas to assist fire-related personnel in their arson related investigations. The Fire Research Lab (FRL) provided a sub-set of data from the FireTOSS system including fire test data, photos, videos, and reports. The FireTOSS system includes data from more than 600 tests demonstrating how materials and fire behave. The fire and flammability testing can be used for various purposes; however, our challenge was focused on the use of the testing data for fire investigations - the investigation launched after a fire has been extinguished - to determine the origin and cause of the fire.

The data from FireToss, was placed on the ATF Open Data public website in an open, interactive format, along with various tools, to allow the data to be easily manipulated by the “hackers”. Participants, both in person and remote, were able to access the data, discuss the business challenges with FRL personnel, and brainstorm ideas on how to aggregate, share, and/or improve search and usability of currently available fire test data. One of the participants was able to demonstrate, via an iPad, how the presentation of the current set of data could be much improved and displayed for mobile devices.

At the end of the 3 hour session, Dr. Holgate (Assistant Director, Office of Science and Technology) stated that the hackathon had successfully demonstrated it could be used as “another venue to work with technologists, developers, and every day citizens to help improve our communities and the public we serve through the use of technology”. Dr. Holgate agreed to follow up on this hackathon with a more focused challenge using the FireTOSS data to allow separate teams or individuals to “compete” against each other and develop multiple approaches that can then be reviewed by ATF for potential use or further exploration.

#### **Background**

ATF’s Fire Research Laboratory (FRL) is the world’s largest research laboratory that is dedicated to fire scene investigations. FRL scientists utilize its unique structure and sophisticated instruments to investigate fire scenes, conduct forensic fire science and engineering tests, and analyze fire growth and dynamics. The FRL conducts investigations that involve fire scene reconstruction; flashover studies; electrical fire cause evaluation; and validation of fire pattern analysis indicators. It also participates in important investigations regarding the impact of accelerants on fire growth and spread, ignition studies and electrical fire cause analysis.